11) Publication number:

0 028 077

A3

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: 80303516.1

(51) Int. Cl.3: G 05 B 19/39

(22) Date of filing: 07.10.80

(30) Priority: 09.10.79 JP 13015279

Date of publication of application: 06.05.81 Bulletin 81/18

88 Date of deferred publication of search report: 26.08.81

84 Designated Contracting States: DE FR GB

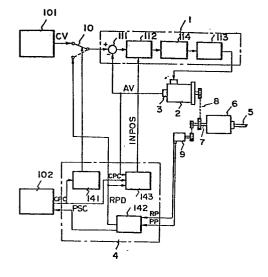
- 71) Applicant: FUJITSU FANUC LIMITED 5-1, Asahigaoka, 3-chome Hino-shi, Tokyo 191(JP)
- (72) Inventor: Kohzai, Yoshinori 16-3, Hirayama 2-chome, Hino-shi Tokyo(JP)
- (72) Inventor: Fujioka, Yoshiki Hino-shataku 102, 27, Tamadaira 3-chome, Hino-shi Tokyo(JP)
- 72 Inventor: Ota, Naoto Dai-ichi Sakae-so 101 38-9, Toyoda 3-chome, Hino-shi Tokyo(JP)
- (4) Representative: Bedggood, Guy Stuart et al, Haseltine Lake & Co. Hazlitt House 28 Southampton Buildings Chancery Lane London WC2A 1AT(GB)

- (54) Spindle rotation control system.
- (5) The system controls the speed of a motor 2 which drives spindle 5.

A speed detector 3 detects actual speed AV of motor 2. A speed control circuit 1 can control the motor so as to make actual speed AV coincide with a commanded speed CV. An orientation control circuit 4 provides a position deviation signal RPD on the basis of rotational spindle position and a commanded stopping position (STP). When signal RPD is applied to speed control circuit 1 in place of commanded speed CV (by means of changeover switch 10) the circuit 1 controls the motor so as to bring the spindle to rest at the commanded stopping position (STP).

An in-position signal generating circuit 143 generates an in-position signal INPOS when the spindle reaches the vicinity of the commanded stopping position (STP) In response to the INPOS signal the gain of speed control circuit 1 (e.g. the gain of a phase compensation circuit 112) is increased to hold the spindle more rigidly in position.

Fig. 5



28 077 A3

EP 0 028



EUROPEAN SEARCH REPORT

Application number EP 80 30 3516

****************	DOCUMENTS CONSIDERED TO BE RELEVANT	CLASSIFICATION OF THE APPLICATION (Int. Cl.3)	
Category	Citation of document with Indication, where appropriate, of relevant passages	Relevant to claim]
	FR - A - 2 388 335 (DAISY SYSTEMS HOLLAND)	1	G 05 B 19/3
	* Page 5, line 1 - page 6, line 32; figure 1; claim 1 *		
	& US - A - 4 219 765		
	$\frac{US - A - 3731176}{et al.}$ (MITCHELL	1	
	* Column 1, line 66 - column 2, line 5; column 3, line 13 - column 4, line 4; figure 1 *	-	TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
	Na. Na.		G 05 B 19/39
	<pre>US - A - 3 644 720 (FALK) * Column 2, line 16 - column 3, line 21; figures 1,3 *</pre>	1	19/23
	FR - A - 2 388 640 (FUJITSU FANUC)	1-4, 6,7	
	* Page 3, line 40 - page 9, line 11; figures 1-5 *		
	& GB - A - 1 579 609		CATEGORY OF
	ton and and		CITED DOCUMENTS X: particularly relevant A: technological background
			O: non-written disclosure P: intermediate document T: theory or principle underlying the invention E: conflicting application D: document cited in the application
/	The present search report has been drawn up for all claims		L: citation for other reasons &: member of the same patent family,
lace of se	arch Date of completion of the search	corresponding document	
	The Hague 04-05-1981	Examiner R	UGGIU